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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yasunori UENO

Application No.: US National Stage of
PCT/JP01/09431

Filed: February 26, 2002

Docket No.: 112064

For: SPECTACLE LENS MANUFACTURING METHOD AND SPECTACLE LENS
SUPPLY SYSTEM

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Page 14, line 1 to page 16, line 3, delete current paragraph and insert therefor:

Fig. 1 is a diagram illustrating the simplified structure of the spectacle lens supply system pertaining to an embodiment;

Fig. 2 is a diagram illustrating the auto-entry screen on which the type of lens is specified;

Fig. 3 is a block diagram of a manufacturer-side computer;

Fig. 4 is a diagram illustrating an example of part of the contents of a customer database;

Fig. 5 is a flow chart of the processing involved in taking an order;

Fig. 6 is a design table (lens data table) for a lens of -2.0 D spherical design;

Fig. 7 is a design table (lens data table) for a lens of -4.0 D spherical design;

Fig. 8 is an astigmatism diagram for -2.0 D;

Fig. 9 is an astigmatism diagram for -4.0 D;

Fig. 10 is an astigmatism diagram of a new prescription lens (aspherical design -4.0 D) obtained by redesign;

Fig. 11 is a diagram illustrating the principle of a ray tracing method;

Fig. 12 is a design table (lens data table) for a lens of -2.0 D spherical design;

Fig. 13 is a design table (lens data table) for a lens of -4.0 D spherical design;

Fig. 14 is an astigmatism diagram for -2.0 D;

Fig. 15 is an astigmatism diagram for -4.0 D;

Fig. 16 is a table of the radius of curvature, etc., of a new prescription lens (aspherical design -4.0 D) obtained by redesign;

Fig. 17 is an astigmatism diagram for a lens produced from the design table in Fig. 16;

Fig. 18 is a design table for a lens with a spherical design;

Fig. 19 is a table of the radius of curvature, etc., of a lens obtained by redesign (-1.0 D);

Fig. 20 is an astigmatism diagram for a lens produced from the design values (-1.0 D) in the table in Fig. 18;

Fig. 21 is an astigmatism diagram for a lens produced from the design values (-3.0 D) in the table in Fig. 18;

Fig. 22 is an astigmatism diagram for a lens produced from the design values (-1.0 D) in the table in Fig. 19;

Fig. 23 is an example of a lens design table for a positive lens spherical design (+1.00 D, +3.00 D);

Fig. 24 consists of astigmatism diagrams for lenses produced by spherical design, with (a) illustrating the case for the left eye and (b) for the right eye;

Fig. 25 is a table of the radius of curvature, etc., of a lens after redesign;

Fig. 26 is an astigmatism diagram for a lens after redesign; and

Fig. 27 consists of diagrams illustrating the screen display of the curved surface shape of a lens before and after redesign.

Page 37, lines 18-22, delete current paragraph and insert therefor:

Fig. 22 is an astigmatism diagram for the lens (left) obtained by redesign. As is clear from Fig. 22, the optical performance is substantially the same as or better than that prior to redesign, while the aesthetic appearance is markedly improved.

IN THE CLAIMS:

Please replace claims 9-13 and 16 as follows:

9. (Amended) The spectacle lens supply system according to Claim 7, wherein the newly determined new design data is registered for the first time or updated in the customer database.

10. (Amended) The spectacle lens supply system according to Claim 7, wherein, when there is old prescription data for the customer, a step is provided for comparing the difference between the old and new prescription values, and if this difference is not over 0.5 D as the diopter difference, the new lens design data for the new prescription values is selected or produced without performing the optical performance comparison step, and this data is set as the design data for producing the new lenses.

11. (Amended) The spectacle lens supply system according to Claim 7, wherein the lens design data is such that the difference in the curve of a first refractive surface of the left and right spectacle lenses is no more than 1 D.

12. (Amended) The spectacle lens supply system according to Claim 7, wherein the optical performance is at least one of astigmatism, curvature of field, and distortion.

13. (Amended) The spectacle lens supply system according to Claim 7, wherein the curvature of at least one of the first refractive surfaces of the left and right spectacle lenses is selected such that this curved surface will be aspherical.

16. (Amended) The method for manufacturing a spectacle lens according to Claim 14, wherein the difference in the diopter between the left and right eyes is 0.5 D or greater when the diopter prescription out of said prescription including the diopter includes a positive diopter, the difference in the diopter between the left and right eyes is 1 D or greater when the diopter prescription includes a negative diopter, and the difference in the curvature of the first refractive surfaces of the left and right spectacle lenses is no more than 1 D.

REMARKS

Claims 1-18 are pending. By this Preliminary Amendment, the specification is amended and claims 9-13 and 16 are amended to eliminate multiple dependencies. Prompt and favorable consideration on the merits is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten paragraph (37 C.F.R. §1.121(b)(1)(iii)) and claim (37 C.F.R. §1.121(c)(1)(ii)).

Respectfully submitted,



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Attached: APPENDIX

Date: February 26, 2002

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DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
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APPENDIX

Changes to Specification:

Page 14, line 1 to page 16, line 3:

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Fig. 2 is a diagram illustrating the auto-entry screen on which the type of lens is specified;

Fig. 3 is a block diagram of a manufacturer-side computer;

Fig. 4 is a diagram illustrating an example of part of the contents of a customer database;

Fig. 5 is a flow chart of the processing involved in taking an order;

Fig. 6 is a design table (lens data table) for a lens of -2.0 D spherical design;

Fig. 7 is a design table (lens data table) for a lens of -4.0 D spherical design;

Fig. 8 is an astigmatism diagram for -2.0 D;

Fig. 9 is an astigmatism diagram for -4.0 D;

Fig. 10 is an astigmatism aberration diagram of a new prescription lens (aspherical design -4.0 D) obtained by redesign;

Fig. 11 is a diagram illustrating the principle of a ray tracing method;

Fig. 12 is a design table (lens data table) for a lens of -2.0 D spherical design;

Fig. 13 is a design table (lens data table) for a lens of -4.0 D spherical design;

Fig. 14 is an astigmatism diagram for -2.0 D;

Fig. 15 is an astigmatism diagram for -4.0 D;

Fig. 16 is a table of the radius of curvature, etc., of a new prescription lens (aspherical design -4.0 D) obtained by redesign;

Fig. 17 is an astigmatism diagram for a lens produced from the design table in Fig. 16;

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Fig. 18 is a design table for a lens with a spherical design;

Fig. 19 is a table of the radius of curvature, etc., of a lens obtained by redesign (-1.0 D);

Fig. 20 is an astigmatism diagram for a lens produced from the design values (-1.0 D) in the table in Fig. 18;

Fig. 21 is an astigmatism diagram for a lens produced from the design values (-3.0 D) in the table in Fig. 18;

Fig. 22 is an astigmatism diagram for a lens produced from the design values (-1.0 D) in the table in Fig. 19;

Fig. 23 is an example of a lens design table for a positive lens spherical design (+1.00 D, +3.00 D);

Fig. 24 consists of astigmatism diagrams for lenses produced by spherical design, with (a) illustrating the case for the left eye and (b) for the right eye;

Fig. 25 is a table of the radius of curvature, etc., of a lens after redesign;

Fig. 26 is an astigmatism diagram for a lens after redesign; and

Fig. 27 consists of diagrams illustrating the screen display of the curved surface shape of a lens before and after redesign.

Page 37, lines 18-22:

Fig. 22 is an astigmatism diagram for the lens (left~~right~~) obtained by redesign. As is clear from Fig. 22, the optical performance is substantially the same as or better than that prior to redesign, while the aesthetic appearance is markedly improved.

Changes to Claims:

The following are marked-up versions of the amended claims:

9. (Amended) The spectacle lens supply system according to Claim 7-~~or~~8, wherein the newly determined new design data is registered for the first time or updated in the customer database.

10. (Amended) The spectacle lens supply system according to Claim 7-~~or~~8, wherein, when there is old prescription data for the customer, a step is provided for comparing the difference between the old and new prescription values, and if this difference is not over 0.5 D as the diopter difference, the new lens design data for the new prescription values is selected or produced without performing the optical performance comparison step, and this data is set as the design data for producing the new lenses.

11. (Amended) The spectacle lens supply system according to Claim 7-~~or~~8, wherein the lens design data is such that the difference in the curve of a first refractive surface of the left and right spectacle lenses is no more than 1 D.

12. (Amended) The spectacle lens supply system according to Claim 7-~~or~~8, wherein the optical performance is at least one of astigmatism, curvature of field, and distortion.

13. (Amended) The spectacle lens supply system according to Claim 7-~~or~~8, wherein the curvature of at least one of the first refractive surfaces of the left and right spectacle lenses is selected such that this curved surface will be aspherical.

16. (Amended) The method for manufacturing a spectacle lens according to Claim 14-~~or~~15, wherein the difference in the diopter between the left and right eyes is 0.5 D or greater when the diopter prescription out of said prescription including the diopter includes a positive diopter, the difference in the diopter between the left and right eyes is 1 D or greater when the diopter prescription includes a negative diopter, and the difference in the curvature of the first refractive surfaces of the left and right spectacle lenses is no more than 1 D.